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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,339	08/21/2001	Tajinder Manku	119.7-US-U1	7876

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GATES & COOPER LLP
HOWARD HUGHES CENTER
6701 CENTER DRIVE WEST, SUITE 1050
LOS ANGELES, CA 90045

EXAMINER

HAM, SEUNGSOOK

ART UNIT PAPER NUMBER

2817

DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

A6

Office Action Summary	Application No. 09/934,339	Applicant(s) MANKU ET AL.	
	Examiner Seungsook Ham	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11 and 12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The subject matter of claims 11 and 12 (i.e., storing computer software code, a computer data signal embodied in a carrier wave) has not been described in the specification. Thus, one skilled in the art would not know how to make the invention based on the subject matter of claims 11 and 12.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 4, 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 3 and 4, "capacitor tank circuit" is confusing as to whether it refers to "said first and second capacitors" in claim 2.

Claims 11 and 12 are vague and indefinite as to how the computer software code is structurally related to the filter structure recited in claim 2.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Grundmann ('796) or Pawley ('966).

Grundmann (fig. 1) an RF filter 21 comprising: first and second capacitors 23, 24 connected in series between an input and an output, an inductor 22 connected in parallel to the series connected capacitors, and a shunt resistor 26 connected between ground and the common side of the first and second capacitors.

Regarding to claims 3 and 4, the shunt resistor 26 is selected to be equal in magnitude to the impedance of the inductor and capacitors at its resonant frequency (see page 2).

Pawley (fig. 4) an RF filter 26 comprising: first and second capacitors 14, 15 connected in series between an input and an output, an inductor 12 connected in parallel to the series connected capacitors, and a shunt resistor 16 connected between ground and the common side of the first and second capacitors.

Regarding to claims 3 and 4, the shunt resistor 16 is selected to be equal in magnitude to the impedance of the inductor and capacitors at its resonant frequency (see columns 6 and 7).

It should be noted that the recitation "An integrated RF filter" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grundmann ('796) or Pawley ('966) in view of Miya et al. ('087) or Ray et al. ("A Highly Linear Bipolar 1V Folded Cascode 1.9 GHz Low Noise Amplifier").

Grundmann and Pawley are applied as above. These references do not show the RF filter forms an integrated circuit. However, it is well known in the art to form an

RF filter in an integrated circuit for a compact design and to increase the operating filter frequency.

Miya et al. (col. 1) teaches forming an integrated RF filter using inductors and capacitors (see col. 4, lines 33-65). Ray et al. also teaches an RF trap filter using silicon bipolar technology (p. 157).

Therefore, it would have been obvious to one of ordinary skill in the art to form the RF filter in an integrated circuit in the device of Grundmann or Pawley to reduce the size of the filter and operate in a high microwave frequency range since such technique is well known in the art as shown by Miya et al. (see also col. 2, line 44 – col. 3, line 33) or Ray et al.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grundmann ('796) or Pawley ('966).

Obtaining a computer software code for the filter of Grundmann or Pawley is considered as an obvious modification since applicant failed to disclose the criticality of such software code.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shearer et al. Tellegen, and Crawford disclose a bridged-T filter with a shunt resistor, and


Khatibzadeh et al. and Havot et al. disclose a bridged-T filter formed in an integrated circuit.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seungsook Ham whose telephone number is (703) 308-4090. The examiner can normally be reached on Monday - Thursday from 8:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on (703)308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.


Seungsook Ham
Primary Examiner
Art Unit 2817

sh
August 8, 2002